

Learnings from five years as a Skype architect

What I'm going to cover

1. The context of Skype
2. Technical learnings
3. Non-technical learnings
4. Conclusion

The context of Skype

Founded in 2003

By a small group of Estonian engineers and two
Scandinavian businessmen

Around 800 000 users per employee

~650 employees, ~521 million registered users

27.2 billion minutes of Skype to Skype calling per quarter

210 000 minutes of calls each minute, 71 000 of which contain video.
This amounts to around five times more video than
Youtube gets in uploads

Core team based in Tallinn

239 people in Tallinn engineering organization,
outposts in Prague, Stockholm, California and Tartu

Main functionality in p2p

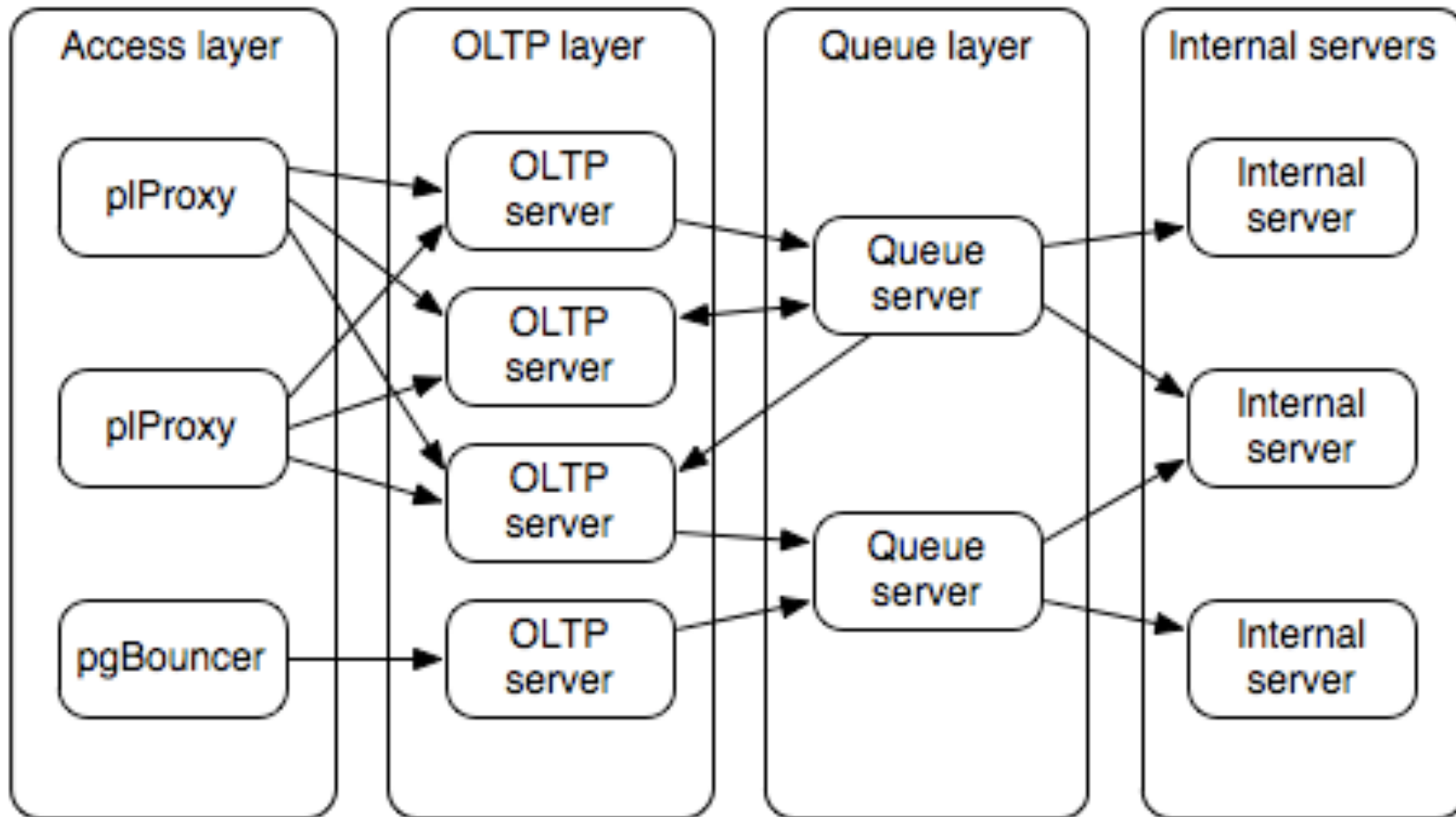
But growing amount of server infrastructure for p2p support,
e-commerce and SIP integration

PHP for web, C or C++ for complex things,
Delphi for windows UI, Postgre for the database

Technical **learnings**

Rules of thumb do not apply

It is always tempting to use patterns that have worked previously but they should be used as a starting point for discussion not as a solution



Functional architecture is important

You neglect how the functionality of your system
is organized at your own peril

Simple things work

The simpler things are the more intelligent they are

Non-technical learnings

Buzzwords are dangerous

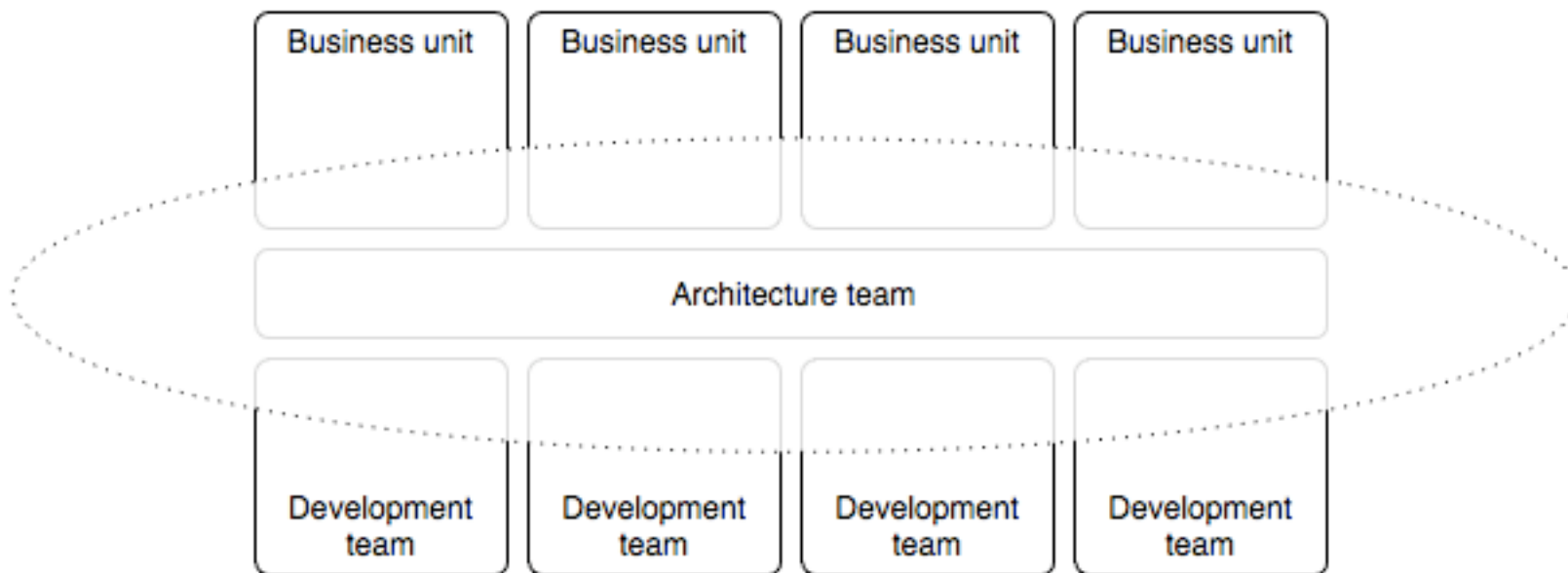
They are dangerous both as carriers of meaningless change but also as a catalyst for breaking down relationships

Architecture needs to fit **your** organization

There is no such thing as a beautiful system design. The design either fits what your organization needs or it doesn't

Communication is important

80% of an architect's job is communication



Conclusion

1. Talk to people!
2. Think about here and now
3. Simple things work, complicated things must be made simple



Thank you for listening

